

Claims

1.-10. (cancelled)

11. (new) A data communication device adapted to exchange different signals with another data communication device using one and the same line and utilizing different frequency ranges, the data communication device comprising:

a first signal exchange device that is activated if signals are to be exchanged with the other data communication device utilizing a first frequency range; and

a second signal exchange device that is used in order to exchange signals with the other data communication device utilizing a second frequency range, wherein

the first signal exchange device will be activated even if signals are to be exchanged with the other data communication device using the second signal exchange device and utilizing the second frequency range in order to avoid changes in line impedance that otherwise occur when the first signal exchange device is activated or deactivated and that disturb the signal exchange via the second frequency range.

12. (new) The data communication device according to Claim 11, further comprising:

a determining device adapted to determine whether changes in line impedance occurring when the first signal exchange device is activated or deactivated will lead to bit errors or an high bit error rate during the signal exchange carried out using the second signal exchange device and utilizing the second frequency range.

13. (new) The data communication device according to Claim 12 in which, when it is determined that changes in line impedance occurring when the first signal exchange device is activated or deactivated will lead to bit errors or an high bit error rate, the first signal exchange device will be activated even if signals are to be exchanged with the other data communication device using the second signal exchange device and utilizing the second frequency range, and the first signal exchange device will otherwise only be

activated if signals are to be exchanged with the other data communication device using the first signal exchange device and utilizing the first frequency range.

14. (new) The data communication device according to Claim 11, wherein not the entire first signal exchange device but, instead, only a part thereof is activated in order to avoid changes in line impedance that occur when the first signal exchange device is activated or deactivated and that disturb the signal exchange via the second frequency range.

15. (new) The data communication device according to Claim 12, wherein not the entire first signal exchange device but, instead, only a part thereof is activated in order to avoid changes in line impedance that occur when the first signal exchange device is activated or deactivated and that disturb the signal exchange via the second frequency range.

16. (new) The data communication device according to Claim 13, wherein not the entire first signal exchange device but, instead, only a part thereof is activated in order to avoid changes in line impedance that occur when the first signal exchange device is activated or deactivated and that disturb the signal exchange via the second frequency range.

17. (new) The data communication device according to Claim 11 in which for exchanging data using the second frequency range and for exchanging data using a third frequency range each of said frequency ranges is allocated a specific number of bits or bit sequences.

18. (new) The data communication device according to Claim 12 in which for exchanging data using the second frequency range and for exchanging data using a third frequency range each of said frequency ranges is allocated a specific number of bits or bit sequences.

19. (new) The data communication device according to Claim 13 in which for exchanging data using the second frequency range and for

exchanging data using a third frequency range each of said frequency ranges is allocated a specific number of bits or bit sequences.

20. (new) The data communication device according to Claim 14 in which for exchanging data using the second frequency range and for exchanging data using a third frequency range each of said frequency ranges is allocated a specific number of bits or bit sequences.

21. (new) The data communication device according to Claim 20 in which, when it is determined that changes in line impedance occurring when the first signal exchange device is activated or deactivated will lead to bit errors or an excessively high bit error rate, the allocation of bits or bit sequences to the second or third frequency range will be changed.

22. (new) The data communication device according to Claim 20, wherein the transmission signals used for exchanging data are DSL signals.

23. (new) The data communication device according to Claim 21, wherein the transmission signals used for exchanging data are DSL signals.

24. (new) The data communication device according to Claim 11, wherein the signals sent using the first frequency range are voice signals.

25. (new) The data communication device according to Claim 12, wherein the signals sent using the first frequency range are voice signals.

26. (new) A data communication device adapted to exchange different signals with another data communication device using one and the same line and utilizing different frequency ranges, the data communication device comprising:

 a first signal exchange device that is activated if signals are to be exchanged with the other data communication device utilizing a first frequency range;

a second signal exchange device that is used in order to exchange signals with the other data communication device utilizing a second frequency range; and

a determining device for determining whether changes in line impedance occurring when the first signal exchange device is activated or deactivated will lead to bit errors or an high bit error rate during the signal exchange carried out using the second signal exchange device and utilizing the second frequency range.

27. (new) A method for data communication, comprising:

activating a first signal exchange device if signals are to be exchanged via a line using a first frequency range; and

determining whether changes in line impedance occurring when the first signal exchange device is activated or deactivated will lead to bit errors or an high bit error rate during a signal exchange carried out via the same line using a second signal exchange device and utilizing a second frequency range.

28. (new) A method for data communication, comprising:

activating a first signal exchange device if signals are to be exchanged via a line using a first frequency range; and

activating the first signal exchange device even if signals are to be exchanged via the line using a second signal exchange device and utilizing a second frequency range in order to avoid changes in line impedance that otherwise occur when the first signal exchange device is activated or deactivated and that disturb the signal exchange via the second frequency range.